

REMARKS

I. Introduction

In response to the Office Action dated January 16, 2007, Applicants have amended claim 1 to more particularly point out and distinctly claim the subject matter of the invention. Claims 4 – 16, 19, 22, 25, 28, 32, 35, 38, and 41 have been canceled.

Applicants note with appreciation the indication that claims 18, 20, 21, 23, 24, 26, 27, 29, 31, 33, 34, 36, 37, 39, 40, and 42 include allowable subject matter. In view of the foregoing amendments and the following remarks, Applicants respectfully submit that all pending claims are in condition for allowance.

II. Claim Rejections Under 35 U.S.C. § 112

Claims 4 – 16, 22, 25, 28, 32, 35, 38, and 41 have been rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite for failing to particularly point and distinctly claim the subject matter of the invention. Applicants have canceled these claims. Accordingly, this rejection is now moot.

III. Claim Rejections Under 35 U.S.C. §§ 102 and 103

Claim 1 stands rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by U.S. Patent No. 6,854,046 to Evans. Claims 2 – 4, 17, and 30 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Evans in view of U.S. Patent No. 6,233,195 to Yamazaki. Applicants traverse these rejections as follows.

Claim 1 recites, among other things, a semiconductor device comprising a first memory unit and a plurality of page memory units obtained by partitioning a second memory unit which is different from the first memory unit and is accessible by the processor at a speed higher than a speed at which the first memory unit is accessible such that each of the page memory units has a storage capacity of several kilobytes. At least these features are not disclosed or suggested by Evans.

Evans is directed to a memory management unit for digital processors. Evans depicts, in Figure 1, a conventional processor system comprising a central processing unit 120, which the Examiner equates with the processor recited in claim 1, and a memory management unit (MMU) 140 which determines whether a page corresponding to the desired virtual address is in memory 130 or whether the page needs to be fetched from secondary storage. The Examiner equates the secondary storage disclosed by Evans with the first memory unit of claim 1. The Examiner refers to column 10, lines 24 – 42 as allegedly disclosing a plurality of page memory units.

Evans does not, however, disclose or suggest that main memory 130 (which the Examiner appears to equate with the second memory unit of claim 1) is partitioned into a plurality of page units, as recited in claim 1. Rather, as clearly depicted in Figure 1 of Evans, main memory 130 may include a page table. As is well known to those of ordinary skill in the art, a page table is a data structure which stores a mapping of virtual addresses to physical addresses. Thus, the page table of Evans is not the same as the plurality of page units recited in claim 1. Evans is completely silent as to partitioning main memory 130, into a plurality of page memory units.

Accordingly, as anticipation under 35 U.S.C. § 102 requires that each element of the claim in issue be found, either expressly described or under principles of inherency, in a single

prior art reference, *Kalman v. Kimberly-Clark Corp.*, 713 F.2d 760, 218 USPQ 781 (Fed. Cir. 1983), and Evans fails to disclose at least the above described elements, it is clear Evans does not anticipate claim 1.

Under Federal Circuit guidelines, a dependent claim is nonobvious if the independent claim upon which it depends is allowable because all the limitations of the independent claim are contained in the dependent claims, *Harness International Inc. v. Simplimatic Engineering Co.*, 819 F.2d at 1100, 1108 (Fed. Cir. 1987). Accordingly, as independent claim 1 is patentable for at least the reasons set forth above, it is respectfully submitted that all dependent claims are also in condition for allowance. In addition, it is respectfully submitted that the dependent claims are patentable based on their own merits by adding novel and non-obvious features to the combination.

IV. Conclusion

Having fully responded to all matters raised in the Office Action, Applicants submit that all claims are in condition for allowance, an indication for which is respectfully solicited.

If there are any outstanding issues that might be resolved by an interview or an Examiner's amendment, the Examiner is requested to call Applicants' attorney at the telephone number shown below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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